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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,642	09/25/2003	Greg Ophelm	30203/38289	6807
4743 7590 02/18/2010 MARSHALL, GERSTEIN & BORUN LLP 233 SOUTH WACKER DRIVE 6300 SEARS TOWER CHICAGO, IL 60606-6357			EXAMINER VERDI, KIMBLEANN C	
			ART UNIT 2194	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/670,642

Applicant(s)

OPHEIM, GREG

Examiner

KimbleAnn Verdi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 20 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krivoshein (U.S. Patent No. 6,449,715, previously cited) in view of Zintel et al. (hereinafter Zintel, previously cited) (U.S. Publication No. 2002/0035621 A1).**

4. **As to claim 1**, Krivoshein teaches a method of updating a host application running on a host system in a process plant (input routine 74 may create or update a device definition for each of the different devices within the remote I/O network wherein this device definition stores data needed to document and/or configure the device; col. 13, lines 36 – 60) wherein the host system (host workstations 14; col. 7, lines 30 – 57) is connected to one of a plurality of process control devices used in the process plant (communicates with devices within the device networks 30, 32, 34 and 36 and with the host workstations 14 to control a process; col. 7, lines 30 – 57), the method comprising:
updating the host application to include the device description (input routine 74 may create or update a device definition for each of the different devices within the

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remote I/O network wherein this device definition stores data needed to document and/or configure the device; col. 13, line 36 – col. 14, line 49).

5. Krivoshein does not specifically disclose sending a first command from the host system to the one of a plurality of process control devices within said plurality of process control devices to request a device description identification for the process control device;

receiving the device description identification at the host system from the process control device; and

downloading a device description associated with the device description identification into the host system using the device description identification.

6. However Zintel teaches sending a first command from the host system (user control point sends discovery request, Figure 14, discover service, Figure 28) to the one of a plurality of process control devices (controlled device, Figure 14, embedded computing device 900, Figure 28, paragraph [0524], lines 8-22) within said plurality of process control devices to request a device description identification (discovery response URL Figure 14, paragraph [0097], lines 1-7, response packet, Figure 28, paragraph [0554], lines 4-9) for the process control device (discovery request/phase, Figure 14 and Figure 28; paragraphs [0097], lines 1-6 and [0554], lines 4-9);

receiving the device description identification at the host system from the process control device (discovery response URL, Figure 14, response to discover, Figure 28, paragraph [0554, lines 4-9); and

downloading a device description associated with the device description identification into the host system using the device description identification (Get_HTTP XML and XML device description, Figure 28, paragraphs [0543], lines 1-5, and [0554], lines 1-5).

7. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Krivoshein to incorporate the features of Zintel. One of ordinary skill in the art would have been motivated to make the combination because this permits a computing device when introduced into a network to automatically configure so as to connect and interact with other computing devices available on the network, without a user installation experience and without downloading driver software or without persisting a configuration setup for connecting and interacting with such other computing devices (paragraph [0009], lines 7-12 of Zintel).

8. **As to claim 9**, this claim is rejected for the same reasons as claim 1 since claim 9 recites the same or equivalent invention, see the rejection to claim 1 above. In addition Krivoshein as modified by Zintel teaches storing a first device description

identification (discovery response URL Figure 14, paragraph [0097], lines 1-7, response packet, Figure 28, paragraph [0554], lines 4-9) identifying a first device description (description document 226, Figure 12 of Zintel) on a first process control device (controlled device 106, Figure 12, discovery response URL, Figure 14, response to discover, Figure 28, paragraph [0554], lines 4-9 of Zintel);

wherein the first device description is used to communicate with the first process control device (establish communication or enable communication between a field device and a controller or other device during runtime of the process control system 10; col. 13, lines 37 – 60 of Krivoshein);

determining if the host system includes the first device description using the first device description identification (col. 14, lines 23 – 50 of Krivoshein); and

automatically downloading the first device description onto the host system if the host system does not have the first device (Get_HTTP XML and XML device description, Figure 28, paragraphs [0543], lines 1-5, and [0554], lines 1-5 of Zintel). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

9. **As to claim 14**, this claim is rejected for the same reasons as claim 1 since claim 14 recites the same or equivalent invention, see the rejection to claim 1 above. In addition Krivoshein as modified by Zintel teaches a computer system for updating a process control host application with a device description of a process control device (col. 13, lines 36 – 60 of Krivoshein), the computer system being connected to a device

description database (col. 14, lines 23 – 50 of Krivoshein) via a communication network, the computer system comprising:

- a processing unit (col. 35, lines 1 – 22 of Krivoshein);
- a computer readable memory (col. 35, lines 1 – 22 of Krivoshein); and
- a software routine stored on the computer readable memory and executable on the processing unit (col. 34, lines 52 – 67 of Krivoshein) to:

- download the device description of the process control device from the device description database (description server 226, Figure 12 of Zintel) using the device description identification (Get_HTTP XML and XML device description, Figure 28, paragraphs [0543], lines 1-5, and [0554], lines 1-5 of Zintel). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

10. **As to claim 19**, this claim is rejected for the same reasons as claim 1 since claim 19 recites the same or equivalent invention, see the rejection to claim 1 above. In addition Krivoshein as modified by Zintel teaches a computer system for use in process plant having a plurality of process control devices and one or more process applications requiring communication with the plurality of process control devices [col. 13, lines 36 – 60 of Krivoshein], the computer system comprising:

- a communication module (user control point, Figure 14 of Zintel) operable to request a device description identification (user control point sends discovery request, Figure 14, discover service, Figure 28 of Zintel) associated with one of the plurality of

process control devices (controlled device, Figure 14, embedded computing device 900, Figure 28, paragraph [0524], lines 8-22 of Zintel) of said plurality of process control devices from the one process control device (discovery request/phase, Figure 14 and Figure 28; paragraphs [0097], lines 1-6 and [0554], lines 4-9 of Zintel);

a storage device (description client, Figure 12 of Zintel) operable to receive the device description from the one process control device (description server 228 of controlled device 106, Figure 12) and store the device description identification (retrieve description document which is downloaded to client, paragraphs [0241], lines 1-3 and p0543], lines 1-5 of Zintel) (user input routine 74 accesses the GSD file to obtain the object type, the identification number, and the hardware and software release of the device revision; col. 21, line 65 – col. 22, lines 9 of Krivoshein);

a search module (simple discovery 924, Figure 27 of Zintel) operable to search for a device description database (description server 228, Figure 12 of Zintel) storing the device description identified by the device description identification (paragraphs [0214], lines 2-4, and [0542] – [0543], lines 1-5 of Zintel);

a downloading module (discovery client, Figure 12, of Zintel) operable to download a device description from the device description database (get description URL, response description, Figure 14, paragraphs [0241], lines 1-3 and [0543], lines 1-5 of Zintel); and

an updating module (input routine 70, Figure 2) operable to update one of the one or more process applications with the device description (col. 13, line 36 – col. 14,

line 49 of Krivoshein). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

11. **As to claim 2**, Krivoshein as modified teaches downloading the device description includes downloading the device description from one of a CD-ROM, a diskette, and an online database (col. 14, lines 23 – 50 of Krivoshein and paragraph [0543], lines 1-5 of Zintel). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

12. **As to claim 3**, Krivoshein teaches updating the host application includes copying the device description into the host application (col. 13, line 36 – col. 14, line 49).

13. **As to claim 4**, Krivoshein teaches the host system is a system in a process plant and the device is one of a plurality of process control devices used in the process plant (col. 4, lines 17 – 45).

14. **As to claim 5**, Krivoshein as modified by Zintel teaches searching for the device description on the host system based on the device description identification (paragraphs [0214], lines 2-4, and [0542] – [0543], lines 1-5 of Zintel). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

15. **As to claim 6**, Krivoshein as modified by Zintel teaches downloading the device description includes: connecting the host system to a communication network (col. 13, lines 36 – 60 of Krivoshein); requesting the device description from a device description database connected to the communication network (col. 14, lines 23 – 50 of Krivoshein); and receiving the device description from the device description database (get description URL, response description, Figure 14, paragraphs [0241], lines 1-3 and [0543], lines 1-5 of Zintel). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

16. **As to claim 7**, Krivoshein teaches the device description database is one of a Fieldbus database, a Profibus database and a HART communication foundation database (col. 34, lines 52 – 67).

17. **As to claim 8**, Krivoshein as modified by Zintel teaches downloading the device description includes storing an Internet address of the device description database (discovery response URL, Figure 14 of Zintel) and using one of an Internet communication protocol and a wireless communication protocol to connect to the device description database (description client connects to description server 226, Figure 12, Get description URL, Figure 14, paragraphs [0241], lines 1-5, [0543], lines 1-5, and [0547], lines 1-3 of Zintel). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

18. **As to claim 10**, Krivoshein teaches storing the first device description information on the host system (col. 7, lines 30 – 57).

19. **As to claim 11**, Krivoshein as modified by Zintel teaches storing the first device description identification (col. 7, lines 30 – 57 of Krivoshein), determining if the host system is connected to the Internet (paragraphs [0120], lines 1-7 and [0121], lines 1-9 of Zintel), initiating an Internet session if the host system is connected to the Internet (discovery request, Figure 14, paragraph [0092], lines 1-6 of Zintel), and sending a request to a device description database connected to the Internet (Get description URL, Figure 14 of Zintel) for downloading the first device description onto the host system (description client connects to description server 226, Figure 12, Get description URL, Figure 14, paragraphs [0241], lines 1-5, [0543], lines 1-5, and [0547], lines 1-3 of Zintel). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

20. **As to claim 12**, Krivoshein teaches storing on the host system a list relating an identification of a device manufacturer to an Internet address of a device description database provided by the device manufacturer (col. 9, lines 13 – 60).

21. **As to claim 13**, Krivoshein as modified by Zintel teaches the host application is one of (1) an asset management system application (col. 15, line 57 – col. 16, line 33 of Krivoshein), (2) a plant simulation application, (3) a plant maintenance application

(paragraph [0524], lines 16-22 of Zintel), (4) a plant monitoring application (paragraph [0524], lines 16-22 of Zintel), and (5) a process control application (col. 34, lines 36 – 54 of Krivoshein). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

22. **As to claim 15**, Krivoshein as modified by Zintel teaches the software routine is further executable on the processing unit to download the device description using one of an Internet protocol and a wireless communication protocol (TCP/IP, paragraphs [0093], lines 1-3, [0241], lines 1-5, [0531], lines 1-4, and [0547], lines 1-4 of Zintel).

The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

23. **As to claim 16**, Krivoshein as modified by Zintel teaches the software routine is further executable on the processing unit to identify a device description language source of the host application (paragraph [0242], lines 1-3 of Zintel), interpret the device description into the device description language source (paragraph [0242], lines 3-5 of Zintel) and insert the device description into the host application (col. 16, line 65 – col. 17, line 23 of Krivoshein). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

24. **As to claim 17**, this claim is rejected for the same reasons as claim 13 since claim 17 recites the same or equivalent invention, see the rejection to claim 13 above.

25. **As to claim 18**, Krivoshein as modified by Zintel teaches the software routine is further to update a remote host application located on a remote computer communicatively connected to the computer system (user control point, Figure 14, [0241], lines 1-5 of Zintel). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

26. **As to claim 20**, Krivoshein as modified by Zintel teaches the downloading module communicates with the device description database using the Internet protocol (TCP/IP, paragraphs [0093], lines 1-3, [0241], [0243], lines 1-2, lines 1-5, [0531], lines 1-4, and [0547], lines 1-4 of Zintel). The motivation for modifying Krivoshein with the teachings of Zintel is the same as provided in the rejection of claim 1 above.

Response to Arguments

27. Applicant's arguments filed on October 20, 2009 have been fully considered but they are not persuasive. In response to the Non-Final Office Action dated July 20, 2009, applicant argues in regards to claims 1-20:

(1) First, Zintel does not teach or suggest a host system sending a first command to a process control device requesting a device description identification for the process control device. Second, Zintel does not teach

or suggest receiving a device description identification at a host system from a process control device (page 8, lines 23-24 and page 9, lines 1-3).

(2) The SSDP discovery request illustrated in Fig. 14 does not correspond to a command sent from a host system to a process control device requesting a device description identification for the process control device. The SSDP request is not a command to a particular process control device requesting a device description identification from the device, as called for in claim 1, but is rather a multicast request looking for any new controlled devices that have been added to the network(See paragraph 554, "At response to discovery, the embedded computing device 900 listens to the multi-last address and then parses the information from a simple discovery request to decide if the request is for its kind of device.") *Rather than the user control point specifically commanding a particular process control device to respond to a request for a device description identification from the process control device, the controlled device receives the multicast request from the user control point and determines for itself whether it is the type of device the user control point is looking for.* If so, the device sends back a response packet containing an IP address or URL where it can be reached, identification of its own device type, and the discovery packet ID so the requesting client knows which request is being answered. **Thus, the multicast discovery request cannot be considered a command requesting a device description request, but rather a request to locate a**

particular type of device of the network (page 9, lines 8-10 and 19-25, and page 10, lines 1-8).

(3) Furthermore, the discovery response (URL) of Zintel Fig. 14, the response to discover of Zintel Fig. 28, the description URL described in Zintel paragraph [0097] and the response packet described in Zintel paragraph [0554] do not correspond to a device description identification as called for in claim 1 of the present application. In other words, the device description identification information claimed in the present application allows the host updating system to search for and locate the device description for a particular process control device on various databases either associated with the process plant or external thereto. The description URL disclosed by Zintel, however, is simply a universal resource locator that always points to a description server located on the controlled device itself. (Zintel, paragraph [0097]). Other than specifying the address at which the device description is located on the controlled device, the description URL does not contain information that would allow a software updating system to locate a device description corresponding to the particular device in a database either associated with a process plant or external to the process plant. Thus, the discovery response (URL) shown in Zintel Fig. 14 does not correspond to a device description identification as called for in the claims of the present application. With regard to the response to discovery shown in Zintel Fig. 28,

Zintel paragraph [0554] describes how the embedded computing device 900 listens to a multicast address and then parses the information from a simple discovery request to decide if the request is for its kind of device. If so, the device then sends back a response packet containing the IP address or URL where it can be reached, identification of its own device type, and the discovery packet ID so the requesting client knows which request is being answered. Although this response to discovery does identify the device type of the embedded computing device, it does not include information about a manufacturer, a device revision number, etc. *In other words, the response discovery URL does not provide sufficient identification information to allow a host updating system to search a separate database for a device description corresponding to the embedded computing device. Thus, the response URL disclosed does not correspond to the device description identification called for in the claims of the present application* (page 10, lines 9-12, 24, and page 11, lines 1-24).

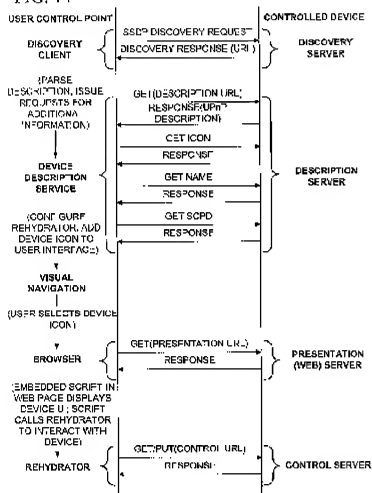
28. In response to argument (1), examiner respectfully disagrees and notes that Zintel discloses a host system sending a first command to a process control device requesting a device description identification for the process control device and receiving a device description identification at a host system from a process control device. Zintel teaches a user control point, *which represents the host system*, issues a SSDP discovery request, *which represents a command requesting a device description identification for the process control device* since the discovery request is an SSDP

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query which specifies a desired device type or capability which expects a Description URL sent in response to the discovery request (paragraph [0097], lines 1-5), to a controlled device, *which represents the process control device*, as shown in Figure 14 reproduced below.

29. In addition Zintel teaches the user control point, *which represents a host system*, receiving the discovery response (URL), *which represents receiving the device description identification*, from the controlled device, *which represents the process control device*, since the user control point can retrieve a description document, *which represents the device description*, by issuing an HTTP GET on the Description URL which is a valid address returned in the discovery response (Figure 14, paragraph [0241], lines 1-7).

FIG. 14



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30. In response to argument **(2)**, examiner respectfully disagrees and notes that Zintel discloses a discovery request which corresponds to a command sent from a host system to a process control device requesting a device description identification for the process control device. See the response to argument **(1)** above, specifically item 28.

31. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *host system specifically commanding a particular process control device to respond to a request for a device description identification from the process control device*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

32. In response to argument **(3)**, examiner respectfully disagrees and notes that Zintel discloses a discovery response (URL) which corresponds to a device description identification. See the response to argument **(1)** above, specifically item 29.

33. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *the device description identification information claimed in the present application allows the host updating system to search for and locate the device description for a particular process control device on various databases either associated with the*

process plant or external thereto, and the device description identification contains information that would allow a software updating system to locate a device description corresponding to the particular device in a database either associated with a process plant or external to the process plant) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

35. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KimbleAnn Verdi whose telephone number is (571)270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hyung S. Sough/
Supervisory Patent Examiner, Art Unit 2194
02/14/10

February 11, 2010
KV